nearly identical with those described above in Case 1. In one of Leigh's cases it was found at necropsy that the swelling had closed the epiglottis and greatly distorted the vocal cords; in another the cords were the site of the greatest inflammation; and in the third case there was some degree of laryngitis, but obstruction was maximal near the bifurcation of the trachea.

In a severe case the symptoms of primary streptococcic laryngitis may be indistinguishable from those of laryngeal diphtheria, and it is probable that not a few are so diagnosed. All of Leigh's cases and one of the author's was given diphtheria antitoxin.

In infants and small children direct laryngoscopy is useful because it allows inspection of the diseased site, and this is otherwise impossible. Such inspection will differentiate the noninfectious types of laryngitis, and the absence of a membrane together with the striking fiery-red appearance of the edematous mucous membranes will suggest a streptococcic infection. Laryngoscopy permits the taking of direct smears and cultures, which will enable positive diagnosis. When done by a skilled operator, laryngoscopy will not superimpose any noteworthy degree of traumatic inflammation and an anesthetic is not required.

REFERENCES

490 Post Street.

1. Leigh, H.: Sudden Death from Acute Laryngeal Obstruction of Nondiphtheritic Origin, Southwestern Med., 11:210, May, 1927.

MULTIPLE POLYPS OF JEJUNUM—WITH INTUSSUSCEPTION*

REPORT OF CASE

By WILLIAM W. WASHBURN, M. D. San Francisco

BECAUSE of the infrequency of intussusception of the small bowel, as well as the rarity of polyps in this location, the following case is presented:

REPORT OF CASE

Patient an Italian, male, laborer, age twenty-one. Entered the Southern Pacific General Hospital Sunday night at 11:30 p. m., August 11, 1928, and was seen shortly after entry to hospital.

History of Illness.—Patient stated that he was first taken ill thirty-six hours before entry. First symptom was severe pain across the upper abdomen which came on a half-hour after eating a hearty fish dinner. He vomited undigested food shortly after the onset of pain, and has vomited almost constantly since. Vomitus became bile-stained, but after twenty-four hours was of a brownish color with foul odor. He vomited castor oil which had been taken soon after he became ill. He was given an enema by a local nurse, after he had vomited the castor oil, which was followed by a small bloody bowel movement. Pain became generalized over the entire abdomen the night before entry to hospital. On entrance the pain was localized more in the left side of abdomen, opposite

the umbilicus, and recurred at frequent intervals in paroxysms.

Patient stated that he had had 'spells of stomach upset' for past eighteen months characterized by abdominal cramps and nausea, occasionally by vomiting. These spells lasted from fifteen minutes to two hours, and in the past were always relieved by taking castor oil. Had never had bloody, clay-colored or tarry stools. He had no history of urinary frequency, burning, tenesmus, or hematuria. Had never been jaundiced. Appetite had always been good and had no constipation. Had always been very thin. Recalls no serious illness. No accidents. No operations.

Examination.—Showed a frail and somewhat emaciated patient apparently in severe pain with drawn facies. Skin dry. Tongue dry and furred. Breath, foul odor. Head, neck, chest, heart, etc., essentially negative.

Abdomen.—There was a noticeably rounded tumefaction just to the left of the umbilicus. No definite peristalsis was noted. Palpation showed rounded mass about the size of a large grapefruit, slightly movable and extremely painful to palpation, which did not extend to the loin or costovertebral angle. No other masses felt. No tenderness in the epigastrium or at McBurney's point. Percussion note over the mass, flat. Upon rectal examination no masses or loops of distended bowel were felt. Pulse rate, 130; poor quality. Respiration, 38. Temperature, normal. White blood count, 4600—white cells with 72 per cent polymorphonuclears, 20 per cent lymphocytes, and 8 per cent large and transitional mononuclears.

Preoperative Diagnosis.—Intestinal obstruction. Volvulus, intussusception or old peritoneal bands were considered as causes in the order named. Because of dehydration and poor condition, the patient was given 1500 cc. of normal salt solution, also gastric lavage. Preoperative hypodermic of morphin grain 1/6 with atropin grain 1/200.

Operation was done under nitrous oxid-oxygen anesthesia. A long right rectus incision was made. Upon opening the abdomen there was a moderate increase of peritoneal fluid which was clear and straw-colored. A large purplish discolored mass of greatly distended intestine was seen when the rectus muscle was retracted medially. The entire mass was delivered outside the abdomen, after enlarging the incision to about fifteen centimeters in length, and it was immediately seen that intussusception had occurred high up in the small bowel. Upon closer examination it was apparent that there were multiple intussusceptions of the upper portion of the jejunum. The two lower ones were reduced by gentle traction. The upper and larger one was irreducible and greatly discolored. The lower one, which was reduced, consisted of a double invagination, so that the bowel wall below, after reduction, was greatly discolored and stretched to the size of a coat sleeve. On palpation a few inches above the irreducible mass a small tumor was felt resembling impacted bowel content. Movement of the mass was restricted and the bowel wall definitely dimpled in with downward traction on the mass. Three similar masses were also felt lower in a portion of the intestines which had been reduced of a double invagination. Because of the one irreducible intussusception present, as well as the poor nutrition of the bowel below, which also contained tumefactions, a resection was necessary. (Patient's condition was fair and 1000 cc. of 5 per cent glucose and Ringer's solution was given intravenously during operation.) Resection of a little over five feet of jejunum was done commencing above the first tumor mass which was felt about twelve inches from the duodenum, and lateral anastomosis done as quickly as possible. Abdomen was closed in the usual manner.

Following operation patient was given stimulants and large quantities of glucose and normal salt solu-

^{*} From the Department of Surgery, Southern Pacific General Hospital, San Francisco.



Portion of jejunum resected showing polyps: A, irreducible invagination; B, invagination; C, double invagination below this point.

tion intravenously and subcutaneously. A rather severe stomatitis developed several days after operation, but cleared up readily with mouth-wash and application of Berwick dye. Several mild spells of diarrhea have been controlled by selected diet and small doses of tincture of opium by mouth. Patient left the hospital after three weeks. His appetite since leaving has been good, the bowels regular. He feels well and has gained twenty-two pounds. Cases in which long resection of small bowel has been done tolerate best a diet poor in fats, but rich in carbohydrates with moderate amount of proteins. Milk is not well tolerated, often passing rapidly through the intestines after ingestion.

This patient was seen four months after operation, was in excellent health, bowels regular, and his weight fifteen pounds above usual.

Pathological Report.—Multiple polypi. No evidence of malignancy. W. T. Cummins, M. D.

Sigmoidoscopic examination before discharge from hospital showed no evidence of involvement of lower sigmoid or rectum. X-rays of colon (barium enema) showed no filling defects.

COMMENT

After a review of the literature the infrequency of multiple polyps in the small intestines is appreciated. Most cases occur in the rectum and colon and occasionally in the stomach.

Ewing ¹ wrote, "The ileum and jejunum are rarely affected," and mentioned Hauser, Kaufman, Lubarsch, Miemack, and Petrow as having reported cases.

- E. L. King ² in reviewing 119 cases of benign tumors of the small and large intestines reported no cases of papilloma in small intestine. Warwick,³ reports one case in which four polyps were found in the small intestines, together with two in the large intestine.
- Z. Cope 4 (British Journal of Surgery, 1922) reported a case of multiple polyps of the small intestine in which intussusception had occurred three times. He was misled at the first operation, believing the papilloma to be impacted bowel content, so after reducing the intussusception the wound was closed. At two succeeding operations the true nature of the tumors was discovered and the papilloma resected.

Petrow ⁵ reported an operation for resection of papilloma of ileocecal valve, ileum, and jejunum which had caused intussusception.

W. L. Peple ⁶ reported a case of polypoid tumor the size of a walnut, with a moderate-sized pedicle that had caused intussusception of the ileum.

Brenner and Denke ⁷ reported a case of polyps of the small intestines that had caused intussusception. In their case, resection of 250 centimeters

of intestine was done. Patient recovered with "no digestive disturbances."

SUMMARY

- 1. The case herewith presented is of multiple polyps of jejunum causing intussusception in which over five feet of jejunum was successfully resected.
- 2. Intussusception of the small bowel is exceedingly rare.
- 3. Multiple polyps are usually found in the large intestines. The small intestine is rarely affected.

384 Post Street.

REFERENCES

- 1. Ewing, J.: Neoplastic Diseases. Philadelphia. Saunders, 1919, p. 652.
- 2. King, E. L.: Quoted by Struthers, Ann. Surg., 1924, xxvii, 649.
- 3. Warwick, Margaret: Minnesota Med., 1922, v, 94-97.
 - 4. Cope, Z.: British M. J., 1922.
- 5. Petrow, Hauser and Kaufman, Lubarsch, Miemack: Quoted by Ewing.
 - 6. Peple, W. L.: Virginia M. Monthly, April, 1924.
- 7. Brenner and Denke: Wien. klin. Wchnschr., 1907, xx, 1649.

MESENTERIC CHYLOUS CYSTS*

REPORT OF CASE

By L. A. ALESEN, M. D. Los Angeles

THE subject of true chyle cysts of the mesentery is one concerning which there was, until the last eight or ten years, comparatively little on record in medical literature. Credit for the first formal article giving a more or less complete description of this condition is generally given to Rokitansky, who wrote at some length concerning it in 1842. Miles F. Porter 1 reported twenty cases in March, 1906, including one of his own. In 1912 Emmanuel Friend 2 summarized the world's literature up to that time, giving a report of fifty-two authentic cases. A year later A. L. Benedict 3 made some additions and corrections to Friend's list, and reported a total of ninety-six cases, with the statement that perhaps two hundred cases might be found by extensive search. Later writers have added individual case reports.

An idea of the rarity of this condition in general hospital work may be gained from the fact that a search of the files of the Los Angeles General Hospital by one of the record clerks failed to reveal a single instance of its occurrence prior to the one herein reported. The records were examined as far back as 1912, and the only condition recorded as a mesenteric cyst was a myxomatous sarcoma of the mesentery operated upon by Dr. O. O. Witherbee in 1921.

Etiologically, nothing is positively known concerning the actual cause of these true chyle cysts of the mesentery. It has been thought that such

^{*} Read before the staff of the Los Angeles General Hospital, October, 1928.